



The Key Techniques For Sutong Bridge Construction Control

Hong Zhang

Chief Engineer
Huazhong University of
Science and Technology,
China

zgb@sneb.com.cn

Hong Zhang, born 1964, received his doctorate from Huazhong University of Science and Technology. He is Chief Engineer of SNEB, CCGC and Chief Engineer for Sutong Bridge construction.

Robin Sham

Executive Director
Maunsell AECOM.
Hong Kong SAR, China

robin.sham@maunsell.aecom.com

Dr Robin Sham, born 1954, received his doctorate from Imperial College, London. He is Leader of Maunsell AECOM's Long Span and Specialty Bridge Group, and Project Director for the Sutong and Stonecutters Bridge projects.

Yong-tao Zhang

Engineer
Second Navigational
Engineering Bureau,
CCCG, China

kiptom@vip.163.com

Yong-tao Zhang, born 1978, received his Masters Degree from Huazhong University of Science and Technology. He is Manager for Construction Control and Monitoring Department for Sutong Bridge construction.

Summary

The 1,088m main span Sutong Bridge in China is set to become the world longest cable-stayed bridge. Sutong Bridge One of the most significant undertakings in the construction of the super long span Sutong cable stayed bridge is construction control. The unique complexity of Sutong Bridge requires specially developed methods and procedures to control bridge geometry and to ensure safety of the bridge during construction. The paper describes key aspects of the integrated techniques adopted for Sutong Bridge construction control, with illustrations of the robust principles and practices in analysis-survey-prediction-correction cycle.

Keywords: Sutong Bridge, cable-stayed bridge, construction control, bridge geometry, Planning, Fabrication, Erection.

1. Introduction

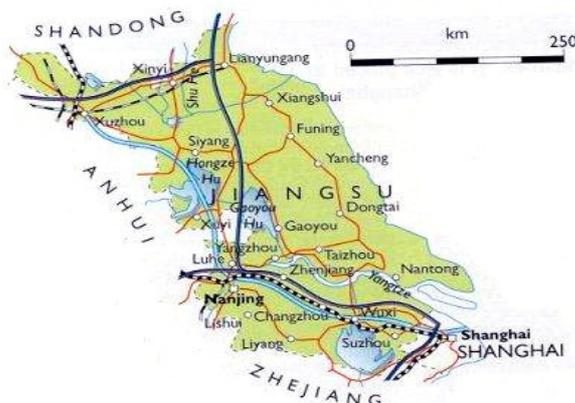


Fig. 1 Location Plan



Fig.2 Panoramic View of Sutong Bridge